REMARKS

The present communication responds to the Office Action dated March 13, 2002. In that Office Action, the Examiner made a series of objections to the drawings, the specification, and the claims. In addition, the Examiner rejected claims 1-14 under 35 U.S.C. 112, second paragraph, as being indefinite and rejected claims 1 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,839,390 to Meads in view of U.S. Patent No. 4,206,766 to Bielka. The Examiner indicated that claims 2-14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims.

Applicant asserts that the Examiner objections to the drawings and the specification have been addressed in the amendments to the specification outline above and in the amendment of drawing 4. Element 36 in drawing 4 was changed to element 10. Applicant has not amended page 4, lines 12 and 13: "In order for removal of the floodcoat layer 16 to expose the indicator layer 12, the floodcoat layer 16 is preferably an opaque layer that, when in place, totally obscures the indicator layer 12." The Examiner stated that "the importance is unclear of what having an opaque layer is to the removal of the layer." If the floodcoat layer 16 is not opaque, the indicator layer is not totally obscured 12 and would be exposed regardless of whether the floodcoat layer 16 is removed. It is only if the floodcoat layer 16 is opaque that removing the floodcoat layer exposes an indicator layer 12 that would not otherwise be exposed. Applicant submits that the above-referenced lines are not unclear and, therefore, they have not been amended.

The Examiner's objections to and rejections of the claims under 35 U.S.C. 112, second paragraph, have been addressed in the Applicant's amendments to claims 2, 3, 4, 7, 8, 10, 11, 13,

and 14 as well as the Applicant's addition of new claims 15 and 16 (corresponding to old claims 5 and 6 respectively).

Applicants have further cancelled, without prejudice, claims 1, 5, and 6.

Accordingly, Applicants submit that each of claims 2-16 is in condition for allowance. As these are the only claims pending in the application, prompt issuance of a Notice of Allowance in this case is courteously solicited. If any additional fees are required to enter the present amendment, Applicant hereby authorizes the Office to charge our deposit account, Deposit Account No. 061910. If the Examiner feels that prosecution of the present application can be materially advanced by a telephonic interview, the undersigned would welcome a call at the number listed below.

Respectfully submitted,

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MARKED-UP VERSION TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Page 1, paragraph 3: "Typically, when an animal, for example, a cow, is not in heat, she will not allow herself to be mounted. Conversely, when a cow is in heat, the cow will show an increased tendency to stand and permit itself to be mounted by other animals for an appreciable time. When the mounted animal allows the mounting animal to remain for about five seconds, a "standing mount" has occurred and the cow is classified as in standing heat. This condition occurs in the early stages of estrus. The most frequent mountings occur by bulls, but mountings are also made by other cows. Accordingly, the repeated mounting of a cow by any other such animal is a good indication that the cow [it] is in heat."

Page 1, paragraph 5: "A variety of prior art devices have been developed for indicating when an animal is in heat by showing when the animal has been mounted. Automatic indicators have been used that are attached to the top rear section of the animal between the hip-bone and spine and are set off by other animals mounting the animal in heat. Typically, the indicators rely on the pressure exerted by the chest or brisket of the mounting animal. A common indicator of this type [of heat] includes a passive apparatus including a reservoir of marker fluid which is compressed by the mounting pressure to discharge some or all fluid and thereby mark the mounted animal. Frequently, these devices suffer from incidental seepage of the marker fluid. This can result in an undesirably short shelf-life of the product. Further, the prior art devices involve complicated dye packet devices that are undesirably complex and expensive."

Page 3, paragraph 8: "The estrus indicator[s] is made up of a plurality of layers. The indicator layer 12 is diagrammatically in the middle of the indicator 10. The indicator layer 12 has an adhesive 14 on its bottom side for attachment to the first animal. A floodcoat 16 is positioned on the top side of the indicator layer 12 [10] to obscure the indicator layer 12 until the floodcoat 16 is removed. Prior to deployment of the indicator 10 on the first animal, a liner 18 is provided along the adhesive 14 and the floodcoat 16."

Page 5, paragraph 1: "Figure 2 depicts an alternate embodiment of the invention wherein the indicator layer is a vinyl substrate or sheet 22. Preferably, the vinyl substrate or sheet 22 is manufactured of white flexible vinyl, which may alternatively be colored. If the vinyl substrate or sheet 22 is white, it is preferably inked or coated with a high-visibility pigment 24 that may be viewed from some distance and will not camouflage on any naturally-occurring color of heifer. Alternatively, the coating may be a colored coating, tint, or stain. The vinyl substrate or sheet 22 used in such an embodiment may be, for example, Fasson® 4 Mil White Flexible Vinyl TC/S730/50#SCK manufactured by Fasson Roll North America (www.fasson.com) dyed with Akzo Nobel SS BW6 Warm Red manufactured by Akzo Nobel Inks Corp. (Plymouth, Minnesota)."

Page 5, paragraph 2: "A rubber-based permanent adhesive 14 suitable for adhesion to the animal's hide is preferably applied to the hide-adhering surface of the vinyl indicator layer. This adhesive may, for example, be Fasson S730 as preloaded on Fasson Spec. #40087 vinyl."

Page 5, paragraph 3: "As seen in Figure 3, a plurality of indicators according to the present invention may optionally be configured not as individual units or pieces but as a single sheet 28. The single sheet 28 may be configured as a planar surface or may be rolled on a cylinder 30. The sheet may then be cut as desired to variable sizes and/or shapes. The sheet thus provides flexibility in the specific size of the indicators. A preferred embodiment of the present invention involves an apparatus for supplying a plurality of indicators wherein the indicators are provided on a single sheet 28. The single sheet 28 is rolled on a cylinder 30. The cylinder 30 thus produces a roll 32 of indicator sheets that may be unrolled and cut as needed. The resultant roll is an inexpensive way of providing a plurality of indicators sizeable to specific needs and providing a simple storage of space indicators."

Page 5, paragraph 6: "When a heifer wearing the apparatus comes into heat, the heifer is likely to be mounted by other heifers from the herd. When another heifer mounts the heifer wearing the apparatus, the floodcoat adheres to the front of the mounting heifer [heiver], pulling the floodcoat off of the indicator layer. Alternately, if the floodcoat is not adhesive on its outer surface (i.e., it adheres only to the indicator layer), the friction caused by the mounting heifer may be expected to rub off the mask layer. The mounted heifer is left wearing the indicator layer, which is visible from a distance, thus indicating that the heifer is in heat. The heifer may then be separated from the herd for insemination or mating. The floodcoat may be removed from the mounting heifer by manual removal, solvent, shaving the area to which the mask is adhered, or any other suitable method."

IN THE CLAIMS:

2. [The indicator of claim 1 further including] An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

an indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal;

a second adhesive layer positioned over the floodcoat layer;

and a liner positioned over the second adhesive layer.

3. [The indicator of claim 1 wherein] An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

an indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal, the floodcoat layer being [is] removably affixed to the indicator layer by a peel off configuration.

4. [The indicator of claim 1 wherein] An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

an indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal, the floodcoat layer being configured to be removed from the indicator layer via friction.

7. [The indicator of claim 1 wherein] An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

an indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal, the floodcoat layer being adapted to be removed only upon [the] application of a predetermined pressure caused by the [a] second animal mounting the first animal.

8. An apparatus for supplying a plurality of estrus indicators [apparatuses adapted to be secured to the rump of a first animal for indicating when the first animal is in heat], the apparatus comprising:

the [a] plurality of estrus indicators, wherein each indicator is adapted to be secured to the rump of a first animal for indicating when the first animal is in heat and wherein each indicator further comprises a first adhesive layer configured for affixation to the first animal, an indicator layer, and a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal; and

a base for holding the plurality of indicators;

wherein the plurality of estrus indicators is [are] configured as a single sheet.

10. The apparatus of claim 9 wherein the plurality of estrus indicators are separated by a perforation between each adjacent indicator.

11. The apparatus of claim 9 wherein the plurality of estrus indicators are configured for separation by cutting the sheet into indicators sized as desired.

13. An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer having a top surface and a bottom surface, the adhesive layer being configured for affixing the estrus indicator [apparatus] to the first animal;

a removable liner attached to the bottom surface of the adhesive layer;

a highly visible [crystal foil] indicator layer having a top surface and a bottom surface, the indicator layer being positioned on the top surface of the adhesive layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for peel off removal upon [the] application of a predetermined amount of pressure as applied by a second animal upon mounting of the first animal by the second animal.

14. An apparatus for supplying a plurality of estrus indicators [apparatuses adapted to be secured to the rump of a first animal for indicating when the first animal is in heat], the apparatus comprising:

the [a] plurality of estrus indicators, wherein each indicator is adapted to be secured to the rump of a first animal for indicating when the first animal is in heat and wherein each indicator further comprises a first adhesive layer configured for affixation to the first animal, an indicator layer, and a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal; and

a cylinder for holding the plurality of estrus indicators;

wherein the plurality of estrus indicators are configured as a single sheet, the sheet being rolled on the cylinder to produce a roll of indicator layers wherein the [indicator] sheet may be cut into indicators sized as desired.

Please add the following new claims:

15. An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

a vinyl indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal.

16. An estrus indicator adapted to be secured to the rump of a first animal for indicating when the first animal is in heat, the apparatus comprising:

a first adhesive layer configured for affixing the estrus indicator to the first animal;

a crystal foil indicator layer; and

a floodcoat layer removably affixed to the indicator layer and adapted for removal by a second animal upon mounting of the first animal by the second animal.

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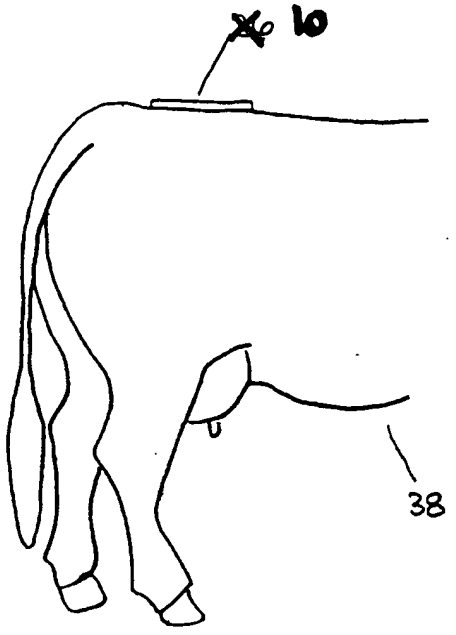

Fig. 4